

REMARKS/ARGUMENTS

The Office Action mailed 10/03/2003 has been carefully reviewed. Reconsideration of this application, as amended, and the following remarks is respectfully requested. The claims presented for examination are: claims 1-15.

Drawings – Figure 1

In numbered paragraph 1 of the Office Action mailed 10/03/2003, the drawings were objected to because Figure 1 is too close to the top of the page. A proposed drawing correction is being presented by a separate letter to the Office Draftsman.

Drawings – 37 CFR 1.84(p)(5)

In numbered paragraph 2 of the Office Action mailed 10/03/2003, the drawings were objected to under 37 CFR 1.84(p)(5) because they do not include reference sign(s) 10 and 23. A proposed drawing correction is being presented by a separate letter to the Office Draftsman.

Information Disclosure Statement

In numbered paragraph 3 of the Office Action mailed 10/03/2003, it was pointed out that the Information Disclosure Statement filed on December 13, 2000 does not fully comply with the requirements of 37 CFR 1.98 because complete copies were not received for the Fiedler et al., Suehiro et al., and Green el journal articles. Complete copies of the Fiedler et al., Suehiro et al., and Green el journal articles are being presented by a Supplemental Information Disclosure Statement.

Claim Objections

In numbered paragraph 4 of the Office Action mailed 10/03/2003, claims 5, 7, 11, and 12 were objected to because of informalities. Applicants have amended claims 5, 7, 11, and 12 to correct the informalities.

### 35 USC 112 Rejection

In numbered paragraph 6 of the Office Action mailed 10/03/2003, claim 5 was rejected under 35 USC 112 as being indefinite. Applicants have amended claim 5 to correct the indefiniteness.

### 35 USC 102 Rejection

In numbered paragraph 8 of the Office Action mailed 10/03/2003, claims 8 and 9 were rejected under 35 USC 102 (b) as allegedly being anticipated by the Milner et al Reference.

Claims 8 and 9 been amended. Amended claims 8 and 9 now include the following structural elements not found in the Milner et al Reference:

"at least one pair of interdigitated electrodes positioned on said surface of said fluidic channel with a space between said interdigitated electrodes,"

"said at least one pair of interdigitated electrodes localized along said fluidic channel, with said at least one pair being located on the same surface of said fluidic channel, said interdigitated electrodes having electrode plates with a surface,"

"antibodies immobilized on said surface of said electrode plates and immobilized in said space between said interdigitated electrodes, wherein said pathogens carried by said fluid attach to said immobilized antibodies,"

"means for detecting the presence of trapped particles, said means including means for the detection of impedance changes between the said electrode plates."

Applicant respectfully submits that the Milner et al. reference does not show the structural elements of claims 8 and 9 now presented for examination. As stated in Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 USPQ 1051, 1053 (Fed. Cir. 1987), "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described

in a single prior art reference." Since the structural elements of the claims now presented for examination are not shown by the Milner et al reference, the rejection is unsupported by the art and should be withdrawn.

#### 35 USC 103 Rejection

In numbered paragraph 10 of the Office Action mailed 10/03/2003, claims 1-6, 8-10, and 12-15 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over the Van Gerwen et al (WO 97/21094) Reference in view of the Stetter Reference (U. S. Patent No. 5,567,301).

Applicants have amended the independent claims 1 and 8 and cancelled claims 12-15. Applicants respectfully submit that amended claims 1 and 8 and dependent claims 2-7 and 9-11 are patentable over the Van Gerwen et al and Stetter References. The Van Gerwen et al. and Stetter References fail to disclose the following elements of the amended claims:

"said at least one pair of interdigitated electrodes localized along said fluidic channel, with said at least one pair being located on the same surface of said fluidic channel, said interdigitated electrodes having electrode plates with a surface,"

"antibodies immobilized on said surface of said electrode plates and immobilized in said space between said interdigitated electrodes, wherein said pathogens carried by said fluid attach to said immobilized antibodies,"

"an AC power source for applying a voltage across electrode plates of said at least one pair interdigitated electrodes for producing an electric field to enable trapping of pathogens passing through said fluidic channel," and

"means for measuring the impedance between said electrode plates for determining the presence of trapped pathogens."

Since both the primary Milner et al. Reference and the secondary Stetter Reference fail to show the missing structure of Applicants amended claims, there

can be no combination of the references that would produce Applicants' invention defined by the amended claims. The Milner et al and Stetter References do not show the claimed combination. There is no suggestion in the references to form a proper combination. Applicants respectfully submit that the 35 USC 103 rejection in numbered paragraph 10 of the Office Action mailed 10/03/2003 has been overcome.

Provisional Double Patenting Rejection - Application 09/737,542

In numbered paragraph 13 of the Office Action dated 10/13/2003, claims 1-15 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-28 of copending Application No. 09/737,542. The Examiner pointed out that "this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented."

Since this is a provisional rejection, Applicants will await further official action. Applicants' subject patent application is assigned to "The Regents of the University of California." Copending Patent Application No. 09/737,542 is also assigned to "The Regents of the University of California."

Provisional Double Patenting Rejection - Application 09/993,870

In numbered paragraph 14 of the Office Action dated 10/13/2003, claims 1-15 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 09/993,870. The Examiner pointed out that "this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented."

Since this is a provisional rejection, Applicants will await further official action. Applicants' subject patent application is assigned to "The Regents of the

University of California." Copending Patent Application No. 09/993,870 is also assigned to "The Regents of the University of California."

Provisional Double Patenting Rejection - Application 09/738,461

In numbered paragraph 15 of the Office Action dated 10/13/2003, claims 1-15 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 09/738,461. The Examiner pointed out that "this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented."

Since this is a provisional rejection, Applicants will await further official action. Applicants' subject patent application is assigned to "The Regents of the University of California." Copending Patent Application No. 09/738,461 is also assigned to "The Regents of the University of California."



Application No.: 09/738,927

SUMMARY

The undersigned respectfully submits that, in view of the foregoing amendments and the foregoing remarks, the rejections of the claims raised in the Office Action dated 10/03/2003 have been fully addressed and overcome, and the present application is believed to be in condition for allowance. It is respectfully requested that this application be reconsidered, that the claims be allowed, and that this case be passed to issue. If it is believed that a telephone conversation would expedite the prosecution of the present application, or clarify matters with regard to its allowance, the Examiner is invited to call the undersigned attorney at (925) 424-6897.

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Respectfully submitted,

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